

CHIGNIK MANAGEMENT AREA
HERRING SAC-ROE FISHERY
MANAGEMENT PLAN 1988

By: Pete Probasco and Jeff Fox

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INTRODUCTION

Description of Area

The Chignik Management Area lies on the south side of the Alaska Peninsula between the Kodiak Area to the east and the Alaska Peninsula Area to the west. Kilokak Rocks is the eastern boundary and Kupreanof Point is the western boundary. The area is subdivided into five districts: the Eastern, Central, Chignik Bay, Western and Perryville (Figure 1).

History of the Herring Fishery

Historical Chignik herring fishery information was combined with the North and South Peninsula Areas and entered under the Southwestern Alaska herring fishery. The earliest recorded commercial herring fishing took place in 1906. Total annual catches for the early 1900's did not exceed one million pounds (500 tons) for the Southwestern Alaska herring fishery. A small herring saltery was operated at Lake Bay in the Chignik Bay District in the early 1930's. The herring were beach seined and salted in barrels for resale. No further breakdown of catch by bays is available. The fishery slowed to a halt in the late 1930's and was not fished again until 1980, when the sac-roë fishery commenced.

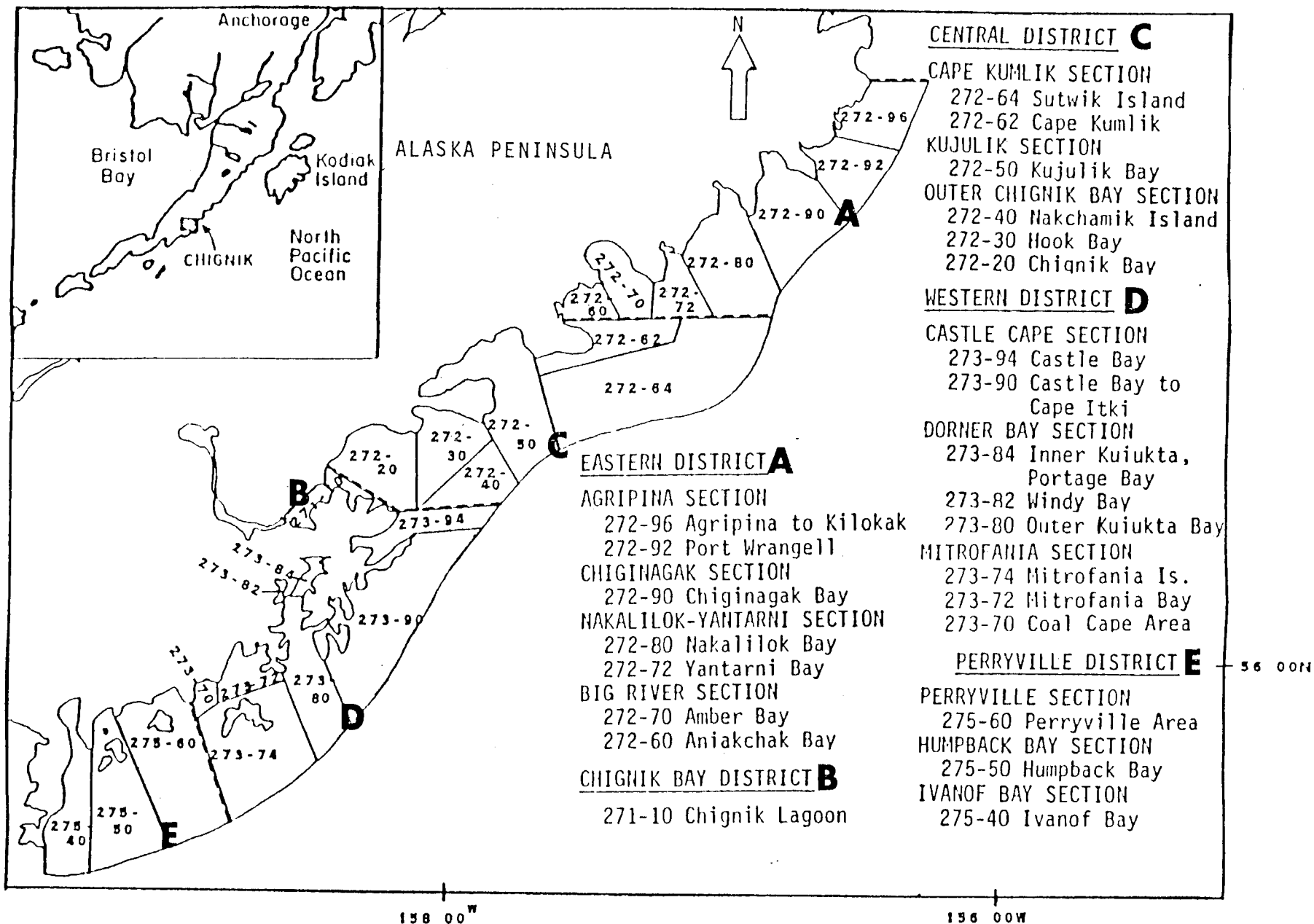
The recent herring fisheries within the Chignik Area began in 1980 and have targeted on sac-roë herring. At this time the fishery may not be totally developed, however recent trends in exploration and effort levels suggest that it will continue to be a relatively low participation, low yield fishery.

Management Strategy

Sac-Roe Fishery

Several relatively small geographic areas have been identified throughout the past eight years as supporting the majority of Chignik's herring spawning biomass, these small areas are managed as discrete stocks.

FIGURE 1. THE CHIGNIK MANAGEMENT AREA



The annual harvest for each known stock is dependent upon the previous year's post-fishery biomass estimates and an exploitation rate of 0-20% of the available spawning biomass. The desired exploitation rate depends upon an evaluation of each stock's status as to trends in biomass, recruitment, and overall age composition. By regulation, the sac-roë season extends from 15 April through 30 June. In-season management further regulates the fishery by allowing alternating 24 hour fishing periods, between 24 hour closures. Each fishing period will begin at 1200 hours (12:00 noon) on odd numbered days throughout the regulatory season and close at 12~~X~~00 hours (12:00 noon) on even numbered days or when the desired harvest level is achieved for each geographic area (stock). Pre-season harvest expectations for each stock may differ from the actual harvest levels if, in-season fishery and stock performance indicate major changes in the health of any given stock, i.e. either a significant unexpected lack or abundance of spawning biomass.

The fishery is monitored by means of frequent contact with fishermen and frequent aerial observations of the fishery and the available herring stocks, as well as daily contact with processors and ADF&G field crews which are strategically placed to monitor this freely roaming fishery. An integral element in successfully managing this type of fishery, i.e. a low yield and long duration fishery by highly efficient gear, is the information collected from fishermen and commercial spotters. This cooperation is definitely encouraged and will be treated confidentially in-season as it has been in the past.

1988
CHIGNIK AREA
ROE HERRING MANAGEMENT PLAN

I. Registration Requirements:

a. Tenders and Processors: Each tender operator and buyer must register in person and obtain their registration packet containing statistical charts, etc. in Kodiak or Chignik prior to fishing (see regulation 5 AAC 27.540).

b. Fishing Vessels: There is no area registration requirements for fishing vessels in 1988.

II. Regulations in Effect:

Refer to the 1988 Commercial Herring Regulation Booklet. 5 AAC 27.590. **BUYER AND TENDER REPORTING REQUIREMENTS.** In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

(1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of the department located in the statistical area before transporting or processing herring;

III. Guideline Harvest Level:

The Statewide policy of harvest on a 0-20 exploitation rate of the available spawning biomass will be followed.

Harvest levels will be determined in season on a bay by bay (stock by stock) basis. The commercial herring harvest from the Chignik Area has been declining since 1980. The harvest range for the past six seasons as been 11 - 694 tons with an average of 200 tons.

The actual 1988 harvest will depend upon the biological condition of the stock, the amount of effort actively exploring throughout the area, and by the availability of local processing. However, it is not expected that the 1988 harvest will reach the seven year average harvest of 200 tons.

IV. Fishing Season:

- a. Herring may be taken from 15 April through 30 June.
- b. Herring may be taken only during periods established by emergency order.

V. Fishing Periods:

Initially fishing periods will be 24 hours long beginning at 1200 hours (12:00 noon) on all odd numbered days and ending at 1200 hours (12:00 noon) on all even numbered days. The first 24 hour fishing period will begin at 1200 hours (12:00 noon) 15 April. Changes in fishing period duration will be announced by emergency order.

VI. Airplanes:

There is no restriction on the use of airplanes in the roe herring fishery.

VII. Legal Herring Gear:

- a. 5 AAC 27.565. (a) Herring may be taken only by purse seines.
- b. 5 AAC 27.575. SEINE SPECIFICATIONS AND OPERATIONS.
No purse seine may be more than 1,000 meshes in depth or more than 100 fathoms in length.

VIII. Tender and Processors Reporting Requirements:

- a. All processors and tender operators will be required to report daily catch information to ADF&G. This can be accomplished either by radio (SSB) or telephone. The

Chignik ADF&G office will stand by on 4125 SSB and VHF frequencies, between 0800 hours - 1000 hours (8:00 - 10:00 A.M.) and 2000 hours to 2200 hours (8:00 P.M. - 10:00 P.M.). The call sign for Chignik is KGB 76 "Chignik Weir", telephone number 845-2243. If unable to contact ADF&G Chignik, your catch information should be given to ADF&G Kodiak or Sand Point via telephone or 4125 SSB. The call signs for Kodiak and Sand Point are WHM20 and WIM77 respectively. Failure to report is a violation of commercial fishing regulations (5 AAC 27.590 (2)); vigorous enforcement of this regulation should be expected as a result of past harvest reporting deficiencies.

- b. Because of the relatively small guideline harvest levels for some bays and districts, the fishing season will be promptly closed by emergency order whenever it appears that accurate catch information cannot quickly be obtained from the processors and tenders by radio or telephone. Prompt reporting will increase the likelihood of reopening certain areas if the summarized catches indicate that the desired guideline harvest levels have not been reached in a certain bay or district and if there are sufficient numbers of herring present in the bay to warrant a reopening.

For Confidential Purposes:

Individual code sheets will be given to each tender/processor for the purpose of reporting catch (tons) and statistical area where herring were caught.

IX. 1988 Management Strategy:

The 1988 Chignik herring management plan will incorporate some of the data collected during the 1980-1987 seasons. Guideline harvest levels are established only for those bays

where historical biomass estimates and fishing effort dictate.

The Big River Section has not received any appreciable recruitment of herring into that fishery since 1980 when it was first harvested.

The trend in this stock's age composition has regressed from a healthy 1980 biomass dominated by 4 and 5 year olds to a diminished biomass in 1986 dominated by 8 and 9 year old fish. No significant recruitment has occurred during this seven year period. Consequently the Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1988 until a biomass of multi-age herring are present in significant quantity and of healthy age composition to warrant exploitation.

Lake Bay 271-10 in the Chignik Bay District and Castle Bay 273-94 in the Castle Cape Section of the Western District will be very closely monitored in 1988 due to drastic reductions in harvests for each of the last five years. Possible reduced harvest levels may result in these areas as better information is collected.

X. Fisheries Monitoring:

Monitoring and biological sampling will be conducted by two man crews based in various bays: Aniakchak, Amber and Castle Bays have been the most productive bays for sac-roe and hence of primary concern. Aircraft will be utilized to supply the crews and conduct in-season aerial surveys throughout the fishery. Close contact between fishermen and monitoring crews will be necessary in order to keep all those concerned informed. Commercial spotter reports on effort and biomass estimates will be used to supplement ADF&G observations and will be welcomed; all such reports will be treated confidentially.

1988 GUIDELINE HARVEST LEVELS CHIGNIK MANAGEMENT AREA¹

Stat. Area	Guideline Management Unit	Harvest Levels	Required Spawning Biomass	
			@20%	@10%
272-20	Amber Bay (Aniakchak Bay)	0 Tons ²	0 Tons	0 Tons
271-10	Anchorage Bay	100 Tons	500 Tons	1,000 Tons
273-94	Castle Bay ³	10 Tons	50 Tons	100 Tons
271-10	Chignik Lagoon	10 Tons	50 Tons	100 Tons
272-30	Hook Bay	10 Tons	50 Tons	100 Tons
275-50	Humpback Bay	20 Tons	100 Tons	200 Tons
275-40	Ivanof Bay	10 Tons	50 Tons	100 Tons
272-50	Kujulik Bay	10 Tons	50 Tons	100 Tons
271-10	Lake Bay ³	10 Tons	50 Tons	100 Tons
272-92 272-96	Port Wrangall ³ (Agripina)	20 Tons	100 Tons	200 Tons
TOTAL		200 Tons	1,000 Tons	2,000 Tons

¹The specific statistical areas listed below are those areas having a historical sac-roë harvest. The remainder of the Chignik Management Area is open for exploration and will be regulated within the statewide herring harvest policy of 0% to 20% of the available spawning biomass.

²The Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1988 until a biomass of multi-age herring are present in sufficient quantity and of healthy age composition to warrant exploitation.

³Possibility of reduced harvest levels exist in this area.

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